

Application No.: 09/700,625

Attorney Docket No.: DALHO1290-1

Filing Date: February 1, 2001

(028614-1102)

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Amendments to the Claims/Listing of Claims

Please amend claims 44, 49-52, 75 and 80 as indicated in the listing of claims presented below. Please cancel claims 37-43, 73, 79 and 81 without prejudice. This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-43. (Cancelled).

44. (Currently amended) The A composition according to claim 37 for local administration comprising a second or third generation antidepressant, and a vehicle suitable for local administration, wherein the second or third generation antidepressant has a structure:

wherein:Ar<sub>3</sub> is a substituted N-containing heterocyclic ring,Y is either an aryl group fused to the heterocyclic ring, or one or two substituents selected from the group consisting of alkyl, alkyloxy, arylalkyl, arylalkyloxy, aryl, heteroaryl substituents, and combinations thereof comprising a total of about 4 to 8 carbons attached to Ar<sub>3</sub>,X is an alkyl group comprising 2 to 5 carbon atoms linking Ar<sub>3</sub> and Ar<sub>4</sub>,Ar<sub>4</sub> is a piperazine attached to X by a first nitrogen atom of Ar<sub>4</sub>, andQ is a benzene ring optionally substituted with a biocompatible halogen and attached to Ar<sub>4</sub> at a second nitrogen atom of Ar<sub>4</sub>, and

wherein the composition further comprises a penetration enhancing agent.

45.-48. (Cancelled).

49. (Currently amended) The A composition according to claim 37 for local administration comprising a second or third generation antidepressant, and a vehicle suitable for local administration, wherein the second or third generation antidepressant has a structure:

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Ar<sub>3</sub>(Y)-X-Ar<sub>4</sub>(Q)wherein:Ar<sub>3</sub> is a substituted N-containing heterocyclic ring,Y is either an aryl group fused to the heterocyclic ring, or one or two substituents selected from the group consisting of alkyl, alkyloxy, arylalkyl, arylalkyloxy, aryl, heteroaryl substituents, and combinations thereof comprising a total of about 4 to 8 carbons attached to Ar<sub>3</sub>,X is an alkyl group comprising 2 to 5 carbon atoms linking Ar<sub>3</sub> and Ar<sub>4</sub>,Ar<sub>4</sub> is a piperazine attached to X by a first nitrogen atom of Ar<sub>4</sub>, andQ is a benzene ring optionally substituted with a biocompatible halogen and attached to Ar<sub>4</sub> at a second nitrogen atom of Ar<sub>4</sub>, and

in a formulation selected from the group consisting of a cream, a lotion, a gel, an ointment, a spray, a patch, a polymer stabilized crystal, and an aerosol.

50. (Currently amended) The A composition according to claim 37 for local administration comprising a second or third generation antidepressant, and a vehicle suitable for local administration, wherein the second or third generation antidepressant has a structure:

Ar<sub>3</sub>(Y)-X-Ar<sub>4</sub>(Q)wherein:Ar<sub>3</sub> is a substituted N-containing heterocyclic ring,Y is either an aryl group fused to the heterocyclic ring, or one or two substituents selected from the group consisting of alkyl, alkyloxy, arylalkyl, arylalkyloxy, aryl, heteroaryl substituents, and combinations thereof comprising a total of about 4 to 8 carbons attached to Ar<sub>3</sub>,X is an alkyl group comprising 2 to 5 carbon atoms linking Ar<sub>3</sub> and Ar<sub>4</sub>,Ar<sub>4</sub> is a piperazine attached to X by a first nitrogen atom of Ar<sub>4</sub>, andQ is a benzene ring optionally substituted with a biocompatible halogen and attached to Ar<sub>4</sub> at a second nitrogen atom of Ar<sub>4</sub>, and

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further comprising a neutralizing agent.

51. (Currently amended) ~~The A composition according to claim 37 for local administration comprising a second or third generation antidepressant, and a vehicle suitable for local administration, wherein the second or third generation antidepressant has a structure:~~



wherein:

Ar<sub>3</sub> is a substituted N-containing heterocyclic ring,

Y is either an aryl group fused to the heterocyclic ring, or one or two substituents selected from the group consisting of alkyl, alkyloxy, arylalkyl, arylalkyloxy, aryl, heteroaryl substituents, and combinations thereof comprising a total of about 4 to 8 carbons attached to Ar<sub>3</sub>,

X is an alkyl group comprising 2 to 5 carbon atoms linking Ar<sub>3</sub> and Ar<sub>4</sub>,

Ar<sub>4</sub> is a piperazine attached to X by a first nitrogen atom of Ar<sub>4</sub>, and

Q is a benzene ring optionally substituted with a biocompatible halogen and attached to Ar<sub>4</sub> at a second nitrogen atom of Ar<sub>4</sub>, and

wherein the composition is formulated for local injection.

52. (Currently amended) ~~The A composition according to claim 37 for local administration comprising a second or third generation antidepressant, and a vehicle suitable for local administration, wherein the second or third generation antidepressant has a structure:~~



wherein:

Ar<sub>3</sub> is a substituted N-containing heterocyclic ring,

Y is either an aryl group fused to the heterocyclic ring, or one or two substituents selected from the group consisting of alkyl, alkyloxy, arylalkyl,

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arylalkyloxy, aryl, heteroaryl substituents, and combinations thereof comprising a total of about 4 to 8 carbons attached to Ar<sub>3</sub>,

X is an alkyl group comprising 2 to 5 carbon atoms linking Ar<sub>3</sub> and Ar<sub>4</sub>,

Ar<sub>4</sub> is a piperazine attached to X by a first nitrogen atom of Ar<sub>4</sub>, and

Q is a benzene ring optionally substituted with a biocompatible halogen and attached to Ar<sub>4</sub> at a second nitrogen atom of Ar<sub>4</sub>, and

wherein the antidepressant is encapsulated in a slow release delivery vehicle.

53. (Previously presented) The composition according to claim 52 wherein the delivery vehicle is selected from the group consisting of a liposome, a microcapsule, and a polymer stabilized crystal.

54.-73. (Cancelled).

74. (Previously presented) A composition for topical administration comprising:

a second or third generation antidepressant, and

a vehicle suitable for topical administration,

wherein the second or third generation antidepressant is selected from the group consisting of maprotiline, bupropion, and reboxetine, and

wherein said vehicle is selected from the group consisting of a cream, a lotion, a gel, an ointment, a spray, a patch, a polymer stabilized crystal, and an aerosol.

75. (Currently amended) The A composition of claim 74 for topical administration comprising:

a second or third generation antidepressant, and

a vehicle suitable for topical administration,

wherein the second or third generation antidepressant is selected from the group consisting of maprotiline, bupropion, and reboxetine, and

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wherein said vehicle is selected from the group consisting of a cream, a lotion, a gel, an ointment, a spray, a patch, a polymer stabilized crystal, and an aerosol, and

wherein the composition further comprises a penetration enhancing agent.

76. (Previously presented) The composition of claim 74, wherein the composition further comprises a neutralizing agent.

77. (Previously presented) A composition for topical administration comprising:  
a second or third generation antidepressant, and  
a vehicle suitable for topical administration,  
wherein the second or third generation antidepressant is selected from the group consisting of maprotiline, bupropion, and reboxetine, and  
wherein said vehicle is a slow release delivery vehicle.

78. (Previously presented) The composition of claim 77, wherein the slow release delivery vehicle is selected from the group consisting of a liposome, a microcapsule, and a polymer stabilized crystal.

79. (Cancelled)

80. (Currently amended) The A composition of claim 79 for topical administration comprising a second or third generation antidepressant, and a vehicle suitable for topical administration, wherein the second or third generation antidepressant has a structure:



wherein:

Ar<sub>3</sub> is a substituted N-containing heterocyclic ring,

Y is either an aryl group fused to the heterocyclic ring, or one or two substituents selected from the group consisting of alkyl, alkyloxy, arylalkyl, arylalkyloxy, aryl, heteroaryl substituents, and combinations thereof comprising a total of about 4 to 8 carbons attached to Ar<sub>3</sub>,

X is an alkyl group comprising 2 to 5 carbon atoms linking Ar<sub>3</sub> and Ar<sub>4</sub>,

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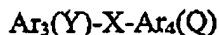
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Ar<sub>4</sub> is a piperazine attached to X by a first nitrogen atom of Ar<sub>4</sub>, and  
Q is a benzene ring optionally substituted with a biocompatible halogen and  
attached to Ar<sub>4</sub> at a second nitrogen atom of Ar<sub>4</sub>, and  
wherein said vehicle is selected from the group consisting of a cream, a lotion, a gel,  
an ointment, a spray, a patch, a polymer stabilized crystal, and an aerosol, and

wherein the composition further comprises a penetration enhancing agent.

81. (Cancelled)

82. (Currently amended) A composition for topical administration comprising a second or third generation antidepressant ~~that is not a 5-HT<sub>2</sub>-receptor antagonist~~, and a vehicle suitable for topical administration, wherein the second or third generation antidepressant has a structure:



wherein:

Ar<sub>3</sub> is a substituted N-containing heterocyclic ring,

Y is either an aryl group fused to the heterocyclic ring, or one or two substituents selected from the group consisting of alkyl, alkyloxy, arylalkyl, arylalkyloxy, aryl, heteroaryl substituents, and combinations thereof comprising a total of about 4 to 8 carbons attached to Ar<sub>3</sub>,

X is an alkyl group comprising 2 to 5 carbon atoms linking Ar<sub>3</sub> and Ar<sub>4</sub>,

Ar<sub>4</sub> is a piperazine attached to X by a first nitrogen atom of Ar<sub>4</sub>, and

Q is a benzene ring optionally substituted with a biocompatible halogen and attached to Ar<sub>4</sub> at a second nitrogen atom of Ar<sub>4</sub>, and wherein said vehicle is a slow release delivery vehicle.

83. (Previously presented) The composition of claim 82, wherein the slow release delivery vehicle is selected from the group consisting of a liposome, a microcapsule, and a polymer stabilized crystal.